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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,970	12/29/2000	Tor Andreas Tveit	45060-00008	9079

7590 07/12/2006

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EXAMINER
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SHARON, AYAL I

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/751,970

**Applicant(s)**

TVEIT ET AL.

**Examiner**

Ayal I. Sharon

**Art Unit**

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-23, 25-28, 32, 33, 35, 36 and 46-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-23, 25-28, 32, 33, 35, 36 and 46-57 is/are rejected.
- 7) ☒ Claim(s) 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/17/06, 4/27/06
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Introduction***

1. Claims 19-23, 25-28, 32-33, 35-36, and 46-57 of U.S. Application 09/751,970 are currently pending.
2. Claims 1-18, 24, 29-31, 34, 37-45 has been cancelled.
3. The application was originally filed on 12/29/2000. The application does not claim priority to any foreign or domestic applications.

### ***Continued Examination Under 37 CFR 1.114***

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/17/2006 has been entered.

### ***Claim Objections***

5. Claim 32 objected to because of the following informalities: The phrase in line 4, "in Information System", should be "in an Information System". Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The prior art used for these rejections is as follows:
- Hecht et al., U.S. Patent 5,657,245. (“Hecht”).
8. The claim rejections are hereby summarized for Applicant’s convenience. The detailed rejections follow.
9. **Claims 32-33, 35, 46-49, 52-53 and 55-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Hecht.**
10. In regards to Claim 32, Hecht teaches the following limitations:

*32. (currently amended) A computer-readable medium having computer-executable instructions to make a computer or a processor operate in Information System comprising one or more databases and a Help Desk to provide maintenance for an electrical power generation, transmission and distribution system and apparatus connected to said electrical power generation, transmission and distribution system, wherein said computer or processor is made to carry out actions to provide maintenance for said electrical power generation, transmission and distribution system including to:*

*receive a data input with a graphic image of a condition of an inspected portion of the electrical power generation,*

(See Hecht, especially: col.4, lines 9-11. Hecht teaches:

“In the case of a nuclear steam generator inspection, the robotic arm of the positioning system is moved into the reactor containment, and the eddy current

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or ultrasonic inspection equipment of the acquiring means 5 is set up at the plant site and connected to the network after the plant has been shut down.”

Examiner interprets that the “ultrasonic inspection equipment of the acquiring means 5” generates a graphic image. It is old and well known that ultrasonic equipment is used to generate images of pregnant women’s fetuses, for example.)

*transmission and distribution system and apparatus connected to said electrical power generation, transmission and distribution system representing at least one maintenance report,*

(See Hecht, especially: col.3, lines 62-65. Hecht teaches:

“With this information, an inspection and maintenance plan is prepared, either manually or by a computer program designed for such a purpose.” Examiner interprets that the location where the maintenance plan is prepared corresponds to a “Help Desk”).

*match the data input to an apparatus connected to a network for said electrical power generation, transmission and distribution system with information stored in a database,*

(See Hecht, especially: col.3, lines 42-46. Hecht teaches:

“The servicing means 11 can monitor system performance and provide an early warning of degraded performance, and it can collect data for the accumulation of a data base upon which design modification and maintenance decisions may be based.”)

*receive a second input documenting a maintenance repair action on the inspected portion,*

(See Hecht, especially: col.3, lines 46-50. Hecht teaches:

“By manipulating such information, the servicing means 11 may be operable to generate maintenance recommendations for the system 1 or any portion thereof during or after each plant application.”)

*link the second documented repair action to the apparatus and network, store the documented repair action.*

(See Hecht, especially: col.3, lines 62-65:

"With this information, an inspection and maintenance plan is prepared, either manually or by a computer program designed for such a purpose.")

11. Claims 33, 35, 46-49, 52-53, and 55-57 are rejected on the same grounds as Claim 32.

12. Further in regards to Claim 35, Examiner finds merely a difference of intended use between sending the report to a branch manager or offsite operation's manager (see Hecht, col.4, lines 42-44) and sending such a report to applicants' "maintenance Service Provider company".

13. Further in regards to Claim 48, Examiner finds merely a difference of intended use between sending the report to a branch manager or offsite operation's manager (see col.4, lines 42-44) and sending such a report to applicants' "parts warehouse."

### ***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is

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advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. The prior art used for these rejections is as follows:

- Hecht et al., U.S. Patent 5,657,245. ("**Hecht**").
- Texas Instruments, E.P. Application 0 369 188 ("**Texas Inst.**")
- Crater et al., U.S. Patent 5,975,737. ("**Crater**").

17. The claim rejections are hereby summarized for Applicant's convenience. The detailed rejections follow.

**18. Claim 19-23, 25-28 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hecht in view of Texas Inst.**

19. In regards to Claim 19, Hecht teaches the following limitations:

*19. (currently amended) An information system for an electrical power generation, transmission and distribution system to provide maintenance for the electrical power generation, transmission and distribution system and apparatus connected to said electrical power generation, transmission and distribution system, said information system comprising one or more databases, said information system comprising:*

(See Hecht, especially: col.1, lines 3-16. Hecht teaches:

"The proper maintenance of industrial components involves many activities and a variety of scientific disciplines ... Typically a steam generator is inspected and cleaned during a plant outage ... Between outages, the history of inspection results and repair activities involving the steam generator may be evaluated ...")

*a service Help Desk,*

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(See Hecht, especially: col.3, lines 62-65. Hecht teaches:

"With this information, an inspection and maintenance plan is prepared, either manually or by a computer program designed for such a purpose." Examiner interprets that the location where the maintenance plan is prepared corresponds to a "Help Desk".)

*mobile inspection means to make a graphic image for an inspection report,*

(See Hecht, especially: col.4, lines 9-11. Hecht teaches:

"In the case of a nuclear steam generator inspection, the robotic arm of the positioning system is moved into the reactor containment, and the eddy current or ultrasonic inspection equipment of the acquiring means 5 is set up at the plant site and connected to the network after the plant has been shut down."

Examiner interprets that the "ultrasonic inspection equipment of the acquiring means 5" generates a graphic image. It is old and well known that ultrasonic equipment is used to generate images of pregnant women's fetuses, for example.)

*communication means at the Help Desk to receive an inspection report comprising a graphic image,*

(See Hecht, especially: col.4, lines 9-11. Hecht teaches:

"The on-site equipment is connected by data link to the off-site equipment prior to beginning the inspection operation.")

*display means at the Help desk to examine at least one of the report and the graphic image,*

(See Hecht, especially: col.4, lines 25-30. Hecht teaches:

"Analysis of the data may be performed by a human or it may be computerized, or any combination thereof.")

*computer and display means to compare at least one of the graphic image and the inspection report with retrieved information, and*

(See Hecht, especially: col.4, lines 36-45. Hecht teaches:



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"[a] means for monitoring 12 may be added to the system 1 to permit interested parties to have access to current inspection/repair status information. Such a node may typically be a personal computer terminal with limited inquiry capability. ... A monitoring means 12 can be located at any location, such as the office of the plant manager or an offsite operations manager's office.")

*ordering and scheduling means to issue purchase orders and work orders in respect of the report in order to provide maintenance service at a later time for the electrical power generation, transmission and distribution system and apparatus connected to said electrical power generation, transmission and distribution system.*

(See Hecht, especially: col.4, lines 36-45. Hecht teaches:

"The monitoring means 12 may also have the capability for preparing periodic reports, such as a daily status report, or a shift turnover report.")

While Hecht expressly teaches (see col.4, lines 36-45):

"[a] means for monitoring 12 may be added to the system 1 to permit interested parties to have access to current inspection/repair status information. Such a node may typically be a personal computer terminal with limited inquiry capability. ... A monitoring means 12 can be located at any location, such as the office of the plant manager or an offsite operations manager's office."

Hecht, however, does not expressly teach that the "personal computer terminal" is "mobile", as claimed in the following limitation:

*mobile terminal, computer and display means to retrieve information from the one or more databases,*

Texas Inst., on the other hand, expressly teaches (see col.1, lines 39-46) the use of

"a hand-held device, a satellite, one or more infrared nodes, and a system in which the device is used, and to a method of providing detailed diagnostic, repair, and maintenance information in a processor-controlled, hand-held device for use in any environment where operating equipment may be maintained by minimally trained personnel."

Hecht and Texas Inst. are analogous art because they are from the same field of endeavor.

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At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the "hand held devices" into the maintenance system taught in Hecht.

The suggestion/motivation for doing so would have been, according to Texas Inst. (see Texas Inst., col.13, lines 10-16):

"In addition to running diagnostic test[s] on systems and machinery on the factory floor, the system, including the hand-held unit, may be use[d] in connection with an alarm system to alert machine operator[s] and maintenance personnel of out-of-process parameters in systems, and malfunctions in machinery."

Examiner notes that in addition, hand-held devices have an advantage over "personal computer terminal": mobility. A user can use a hand-held device while in transit, or while performing a task. A "personal computer terminal", on the other hand, can only be used in the room in which the terminal sits.

20. Claims 20-23, 25-28, and 51 are rejected on the same grounds as Claim 19.

**21. Claims 50 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hecht in view of Crater.**

22. In regards to Claim 50, Hecht does not expressly teach the following limitations:

*50. (previously presented) The method according to Claim 46, wherein at least one of the electronic report and recommendation are transmitted over the Internet.*

Crater, on the other hand, expressly teaches of a "web server" (Fig.1, Item 45) and "web pages" (Fig.1, Items 401 and 402) in a distributed interface architecture for industrial control systems.

Hecht and Crater are analogous art because they are from the same field of endeavor: power generation management and maintenance.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify Hecht by using a web-based ("Internet") network used to communicate between the different components.

The suggestion/motivation for doing so would have been, according to

Crater, col.2, lines 48-54:

“By combining data with functionality for displaying that data at the individual controller sites, the need to equip monitoring computers with specialized graphic capabilities is eliminated, along with the need for intensive, ongoing cooperation between engineers responsible for programming controllers and those who configure the computers that perform billing.”

Therefore, it would have been obvious to combine Hecht with Crater to obtain the invention as specified in Claim 50.

23. Claim 54 is rejected on the same grounds as Claim 50.

**24. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hecht in view of Official Notice.**

25. In regards to Claim 36, Hecht does not expressly teach the following limitations:

*36. (currently amended) A computer-readable medium according to Claim 32, which comprises computer code means or software code portions including executable parts formed or written as one or more object oriented programs and accessible and implementable over a network.*

Official Notice is given that object-oriented software programming languages were old and well known at the time the invention was made.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Hecht by implementing the software programs by programming them in object-oriented software programming languages, because object-oriented languages are one of several functionally equivalent design choices (the others being non-object oriented

software languages) that would be irrelevant to the functioning of the claimed invention.

***Correspondence Information***

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ayal I. Sharon whose telephone number is (571) 272-3714. The examiner can normally be reached on Monday through Thursday, and the first Friday of a bi-week, 8:30 am – 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached at (571) 272-3753.

Any response to this office action should be faxed to (571) 273-8300, or mailed to:

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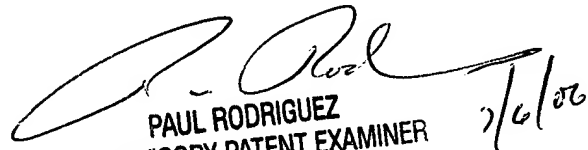
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center 2100 Receptionist, whose telephone number is (571) 272-2100.

Ayal I. Sharon  
Art Unit 2123  
June 30, 2006

  
PAUL RODRIGUEZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100 7/6/06